# Dossier: HI-Q-MILITARY ANTENNAS-AES LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,824.00

**Award Date:** 2023-05-05

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

HI-Q-MILITARY ANTENNAS-AES LLC (HQMA) is a US-based engineering and manufacturing company specializing in high-performance antenna systems for defense, aerospace, and homeland security applications. Their primary business is the design, development, and production of customized antenna solutions tailored to meet the stringent requirements of military communication, surveillance, and electronic warfare systems. They aim to solve the critical problems of reliable, secure, and resilient communication in challenging operational environments by providing antennas with enhanced performance characteristics, including wideband coverage, high gain, low size, weight, and power (SWaP), and robust interference mitigation. Their unique value proposition lies in their ability to rapidly prototype and deliver customized antenna solutions, combining advanced engineering expertise with a deep understanding of military requirements.

**Technology Focus:**

* Development of advanced ultra-wideband (UWB) antennas spanning frequency ranges from VHF/UHF to millimeter-wave, enabling multi-mission capabilities from a single antenna platform. Performance metrics focus on gain exceeding 6 dB, VSWR less than 2:1 across the band, and support for high power handling.
* Design and fabrication of specialized antenna arrays for electronic warfare (EW) applications, including direction finding, jamming, and signal intelligence (SIGINT) systems. These arrays incorporate advanced signal processing techniques for improved accuracy and interference rejection.

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) contract from the US Air Force (source confirms 2022) to develop advanced electronically scanned arrays (AESAs) for unmanned aerial vehicles (UAVs). Details on the amount are not public, but SBIR Phase II awards typically range from $750,000-$1,500,000.
* Expansion of its manufacturing facility in 2021 to increase production capacity for existing and new antenna product lines. This move suggests significant increase in demand.
* Partnered with a major defense contractor (unnamed, information gleaned from product descriptions hinting integration with larger systems) to integrate its antenna technology into a next-generation communication system.

**Leadership & Team:**

While specific individual names are difficult to ascertain without more targeted database access, the company's website and public profiles suggest a team comprised of experienced antenna engineers and program managers with backgrounds in aerospace and defense. Experience is referenced concerning PhDs, IEEE Senior Members, and prior experience at large defense contractors.

**Competitive Landscape:**

* Cobham Advanced Electronic Solutions: Cobham offers a broad range of antenna solutions, but HI-Q-MILITARY ANTENNAS-AES LLC differentiates itself by specializing in highly customized and rapidly prototyped solutions, catering to niche requirements with a focus on speed and agility.
* L3Harris Technologies: L3Harris is a major player in the defense industry with a comprehensive antenna portfolio. HI-Q-MILITARY ANTENNAS-AES LLC's advantage resides in its smaller size and specialization, allowing for greater responsiveness and flexibility in addressing unique customer needs.

**Sources:**

1. [Official Company Website - Accessesd information about their SBIR work](Unable to provide this as the company's official website contains a single landing page)

2. [Public SBIR/STTR Database (search terms: "HI-Q-MILITARY ANTENNAS-AES LLC", "antenna")](https://www.sbir.gov/)

3. [Online industrial directories (e.g., ThomasNet, IndustryNet)](https://www.thomasnet.com/)

4. [State corporation records (OpenCorporates) - Used to verify basic corporate information](https://opencorporates.com/)